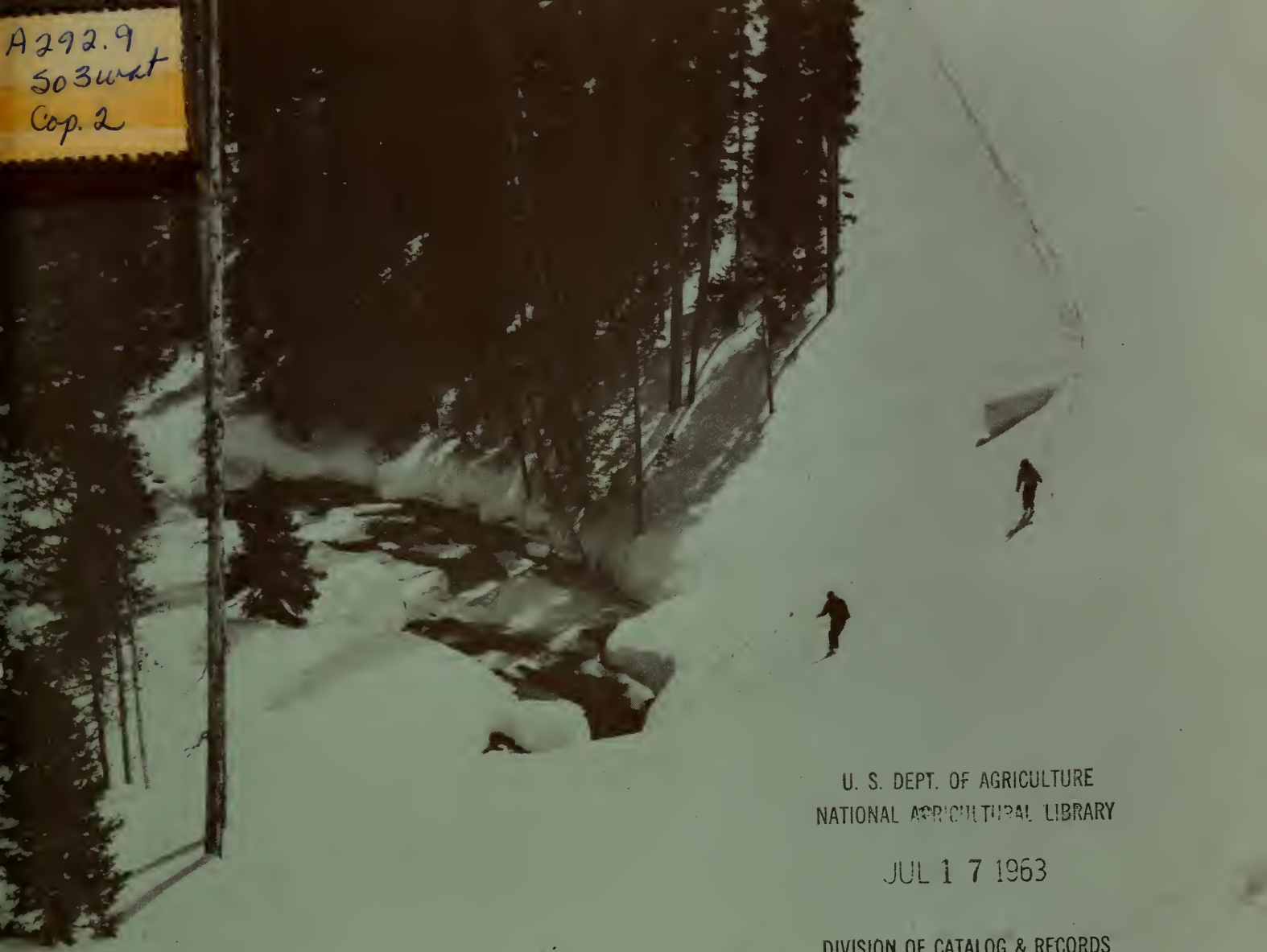


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JUL 17 1963

DIVISION OF CATALOG & RECORDS

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**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
**for**  
**IDAHO**

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.  
and  
IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

||||||| AS OF |||||  
**JAN. 1, 1963**

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 4170, Portland 8, Oregon.

### PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
<b>RIVER BASINS</b>			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
<b>STATES</b>			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

### PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RIGHTS BR., DEPT. OF LANDS, FORESTS AND NATURAL RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**IDAHO**

*Report prepared by*

MORLAN W. NELSON      Snow Survey Supervisor

*and*

J. ALDEN WILSON      Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE  
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DEPARTMENT OF RECLAMATION  
BOISE, IDAHO





# WATER SUPPLY OUTLOOK for IDAHO

206118

3111-39



## GENERAL SUMMARY - JANUARY 1, 1963

The light snow pack so far in 1963 indicates a low water supply outlook for the entire State of Idaho. Carry-over storage on the Snake, Boise, and Payette Rivers is excellent and can make up for deficient streamflow. On many of the small rivers with limited storage facilities, the outlook is for well below normal water supplies. Precipitation and snowfall during the fall and early winter of this season was extremely light. Temperatures, high in the mountains, were warm for the month of December.

In average years, about one-third of the snow pack is down by January 1. With from 60% to 65% of the snow cover yet to fall, the water supply outlook could change considerably. Snowfall for the remainder of the winter will have to average from 150% to 160% of normal to produce average water supplies for this season. Such heavy snowfall is only remotely possible.

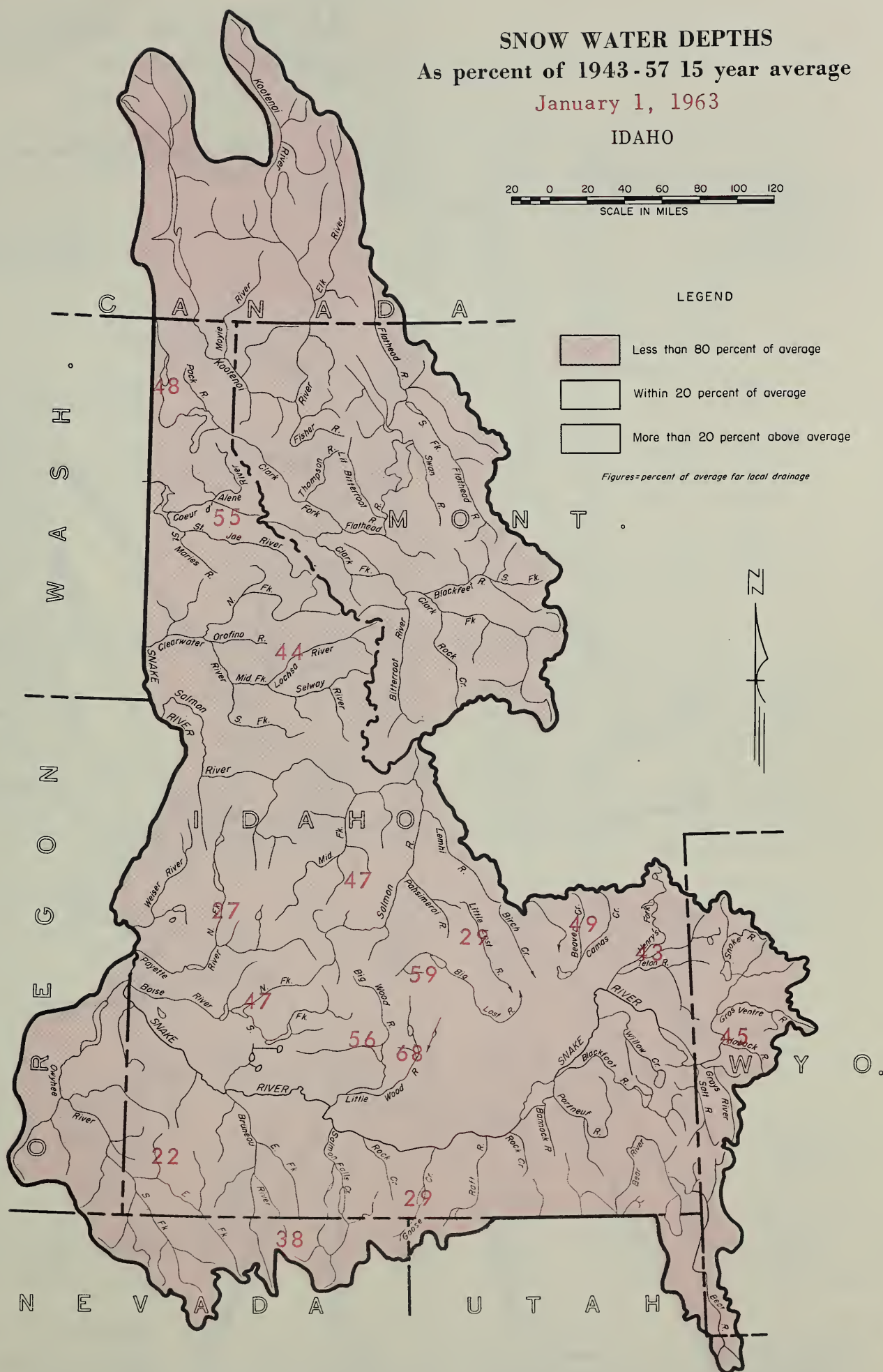
Generally speaking, snow cover at this time throughout Idaho is well below the 1961 or 1962 season. On some rivers, such as the headwaters of the Snake, it is slightly more than was measured in January of 1960 which was a year of low streamflow during the irrigation season.

Soil moisture conditions, as measured at key snow courses, indicate soil moisture beneath the snow pack is also below normal. This is particularly true at the higher elevations where it has the greatest affect in reducing runoff from the snow pack.

Eight of thirty-eight key snow courses throughout Idaho have the lightest snow pack on record. These courses are generally distributed throughout the state. There are several other snow courses on the headwaters of the Snake River in Wyoming with records ranging back to 1919 which are not the lowest but are comparable to the extremely dry years during the 1930's.

Snow cover, which ordinarily acts as a good insulator and prevents the soil from freezing, has not occurred so far this year. Light snow cover in the valley and lower mountain areas has resulted in frozen soil to greater than normal depths. This condition poses a special hazard when snowfall does occur if followed by warm rains. Under these conditions, the soil cannot absorb melting snow and rain water and, therefore, can produce high and damaging runoff such as occurred last winter in the vicinity of Idaho Falls and on the Portneuf River.





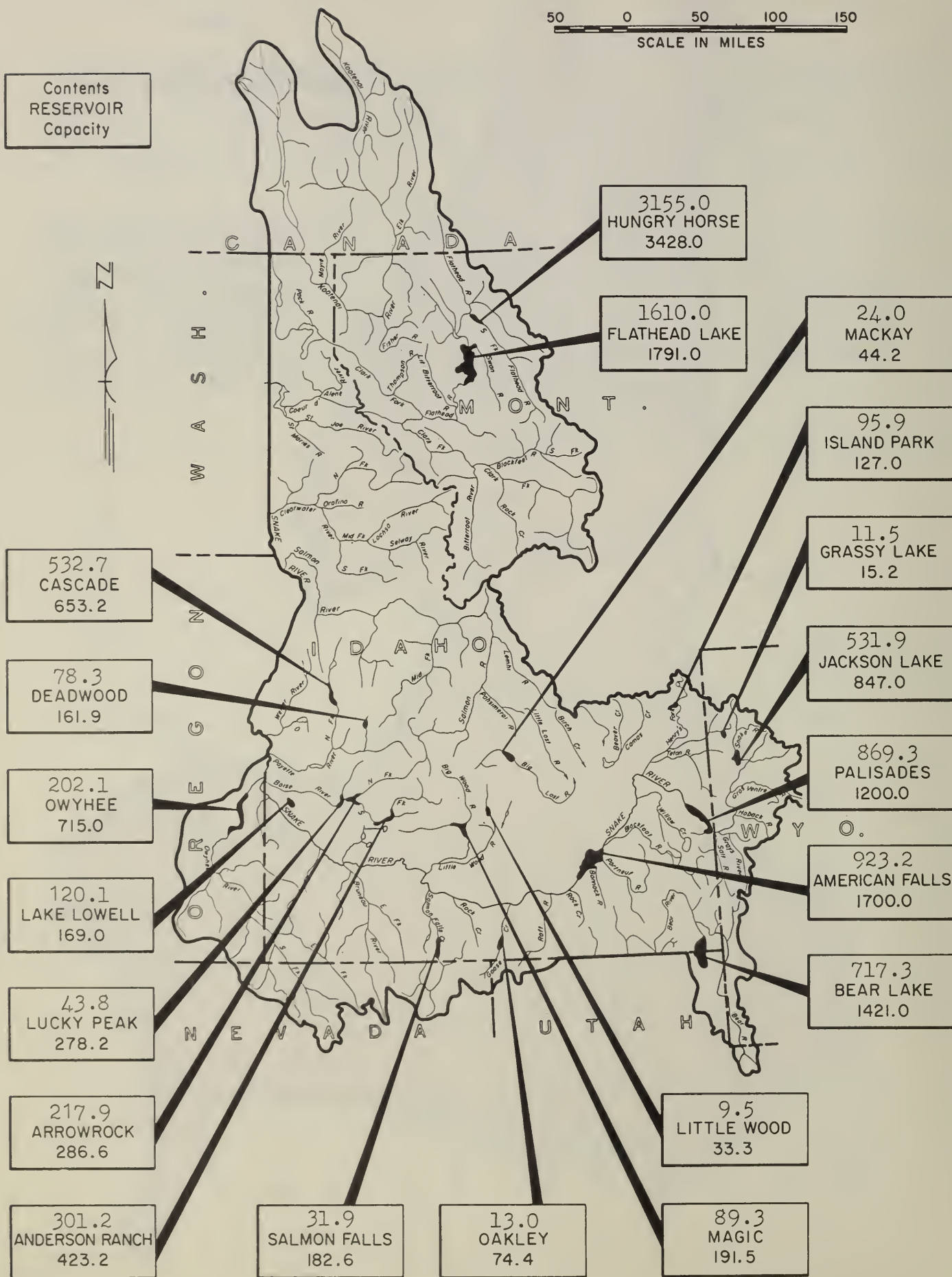
# RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

January 1, 1963

50 0 50 100 150  
SCALE IN MILES

Contents  
RESERVOIR  
Capacity



TOTAL SOIL MOISTURE 1/

Drainage Basin & Station	Elev.	Soil Profile		Date	Fall & Winter Soil		
		<u>in Inches</u>			<u>Moisture (in inches)</u>		
		Depth :	Cap.		62-63	61-62	60-61

CLEARWATER RIVER

Brown	3100	36	6.7	12/31	4.4	4.2*	--
Fohl	3450	48	13.3	12/31	8.6	8.0*	--
Midway	2200	36	6.1	12/31	3.9	3.7*	--

BOISE-PAYETTE RIVERS

Bogus Basin	6120	48	13.1	12/31	7.3	4.7	6.1
Bogus Basin Road	4830	48	7.1	12/31	4.9	5.6	4.8

OWYHEE RIVER

Mud Flat	5500	48	12.8	11/5	5.9	5.6	--
Triangle	5150	60	16.2	11/5	12.0	--	--

RAFT RIVER, GOOSE CREEK, SALMON FALLS CREEK, BRUNEAU RIVER

Badger Gulch	6660	36	7.0	12/27	5.2	5.1	--
Bear Creek	7800	72	16.8	10/31	7.0	8.7	8.6
Conner Pass	5700	36	9.8	12/31	5.6	6.4	--
Deadline	6900	36	7.4	12/31	3.4	4.5	--
Patrick Ranch	5720	36	7.7	12/28	3.1	3.1	3.2
Pole Creek R. S.	8330	48	12.7	12/28	6.4	8.4	5.2
Trapper Creek	5300	36	10.0	12/27	3.4	4.2	--

LITTLE WOOD RIVER

Garfield R. S.	6554	36	5.2	12/27	3.0	3.9	2.6
Niggerhead	5450	36	10.1	12/27	6.6	6.7	7.1

PORTNEUF RIVER

Lower Pebble	5800	36	7.6	11/6	6.3	7.3*	--
Pebble Creek	6550	48	7.2	11/6	4.3	4.4*	--

LITTLE LOST RIVER

Bell Mountain Bar	6640	18	3.6	11/28	1.1	2.0	--
Big Flat	7050	18	3.6	11/28	1.1	1.1	--
Cedarville Bar	5400	18	3.0	11/28	0.9	1.0	--
Fairview Guard Station	5850	42	7.6	11/28	4.5	4.3	--
West Big Flat	6550	18	3.2	11/28	1.0	1.0	--

\*Spring Measurements.

1/ Determinations of soil characteristics and soil density for Idaho stations provided by Claude Pair and David E. Miller, Agricultural Research Service.



# VALLEY PRECIPITATION 1/

## Division Averages and Departures In Inches

DRAINAGE DIVISIONS	Fall		Winter	
	Sep.-Oct.-Nov. 1962		December 1962	
	Average <u>2/</u>	Departure <u>3/</u>	Average <u>2/</u>	Departure <u>3/</u>
Kootenai, Canada & U. S.	6.91	+0.89	2.80	-0.26
Flathead	5.19	-0.02	1.83	-0.27
Clark Fork	3.79	+0.89	0.70	-0.30
Pend Oreille-Spokane	10.30	+1.47	3.30	-0.82
Upper Snake	3.00	-1.83	0.60	-1.88
Snake River Plain	1.66	-0.44	0.40	-0.61
Salmon-Payette-Boise	6.88	+2.17	1.42	-1.34
Clearwater	9.60	+2.90	2.65	-0.42
Southeastern Oregon	7.14	+1.24	0.65	-0.67

1/ Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

2/ 15-year (1943-1957) division average.

3/ Departure from 15-year (1943-57) drainage division average.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

UPPER COLUMBIA DRAINAGEPRIEST RIVER

Benton Meadow	16A2	2344	12/31	0	0.0	6.0	3.1
Benton Spring	16A3	4900	12/31	23	5.9	12.8	9.1

SPOKANE RIVER

4th of July Summit	16B3	3100	12/28	T	T	7.2	--
Lookout	15B2	5250	12/28	33	9.0	22.9	16.4*

SNAKE RIVER BASINMUD LAKE DRAINAGE

Camp Creek	12E3	6800	12/28	11	2.2	5.0	4.2*
Kilgore	11E12	6200	12/28	9	2.1	6.1	4.6*

HENRY'S FORK - TETON RIVER

Big Springs	11E9	6500	12/30	15	3.2	13.5	8.2
Island Park	11E10	6315	12/30	14	3.0	10.2	6.3
Pine Creek Pass	11F2	6750	12/27	10	1.9	8.4	--
State Line	11F1	6400	12/27	9	1.9	8.1	6.6*
Teton Pass	10F13	8500	12/27	23	5.8	18.3	16.3*
Valley View	11E8	6500	12/30	21	4.7	9.0	5.8

SNAKE RIVER - Raft River, Goose Creek, Salmon Falls Creek, Bruneau River

Badger Gulch	14G3	6660	12/27	0	0.0	7.3	--
Bear Creek (A)	15H1	7800	12/31	12	2.9	8.1	7.1*
Bostetter R. S. (A)	14G1	7500	12/31	9	1.8	12.1	7.6*
Boy Scout Camp (A)	13G2	7600	12/31	17	3.8	17.4	--
Cedar Creek (A)	14G5	7000	12/31	8	1.7	3.7	--
Clear Creek Mdws. (A)	13H2	9050	12/31	17	4.1	13.4	--
Deadline	14G4	6900	12/28	12	2.4	13.0	8.2*
Goat Creek (A)	15H13	8800	12/31	10	2.4	5.8	6.6*
Howell Canyon	13G1	8000	12/27	13	2.9	14.5	9.0*
Hummingbird Spgs. (A)	15H15	8945	12/31	12	2.9	8.3	7.8*
Magic Mountain	14G2	6700	12/28	9	2.5	9.8	7.8*
Pole Creek R. S.	15H14	8330	12/28	14	3.4	7.6	6.7*
Red Point (A)	15H18	7940	12/31	4	1.0	3.1	--
Summit Springs (A)	13G4	8500	12/31	T	T	7.7	--
Vi Pont (A)	13H3	7650	12/31	8	1.8	11.9	--
Wilson Creek (A)	15G2	7500	12/31	6	1.5	6.3	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average.  
 (A) Aerial observation: Water content estimated.

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

LITTLE LOST RIVER

#Borah (A)	13E8	8250	1/2	8	1.6	--	--
Fairview Guard Sta.	13E5	5850	12/27	T	T	1.8	2.6*
Lost-Garfield	13E3	5700	12/27	0	0.0	2.0	2.0*
Moonshine	13E6	7250	12/27	10	2.0	5.2	6.1*
Sawmill Canyon	13E4	6000	12/27	8	1.5	4.2	4.2*
Wet Creek Summit	13E7	8175	12/28	11	2.2	5.0	4.9*

BIG LOST RIVER

White Knob	13F1	7700	12/26	10	2.0	2.4	3.4*
------------	------	------	-------	----	-----	-----	------

BIG WOOD RIVER

#Couch Summit (A)	14F10	7000	12/30	20	4.9	11.1	--
Dollarhide Summit (A)	14F8	8620	12/30	26	6.9	12.8	13.0*
Galena	14F1	7500	12/28	19	5.0	10.5	7.6*
Galena Summit	14F12	8795	12/28	23	6.1	12.7	9.5*
Graham Ranch	14F5	6200	12/26	14	3.3	7.4	6.5
Mount Baldy	14F9	9000	12/26	19	4.7	10.2	9.6*
Soldier Rgr. Sta.	14F11	6100	12/29	11	3.4	6.4	--

Little Wood River

Garfield R. S.	13F4	6554	12/27	12	2.5	4.6	4.4*
Muldoon	13F5	6300	12/27	13	2.6	4.3	3.1*
Porcupine (A)	14F14	8350	12/30	37	9.1	9.2	--
Swede Peak (A)	13F9	7500	12/30	21	5.2	7.6	--

BOISE RIVER

Atlanta Summit (A)	15F4	7500	12/29	25	6.7	18.8	13.4*
Bad Bear	15F2	5500	12/30	T	T	9.6	--
#Bogus Basin	16F2	6120	12/31	10	2.3	13.3	10.7*
Bogus Basin Road	16F4	5360	12/31	0	0.0	3.0	1.7*
Couch Summit (A)	14F10	6950	12/30	20	4.9	11.1	--
#Dollarhide Summit (A)	14F8	8620	12/30	26	6.9	12.8	13.0*
#Galena	14F1	8795	12/28	19	5.0	10.5	7.6*
#Galena Summit	14F12	8795	12/28	23	6.1	12.7	9.5*
Little Camas Flat (A)	15F12	4950	12/29	0	0.0	--	--
Long Tom (A)	15F13	4550	12/29	0	0.0	--	--
Moore's Creek Summit	15F1	6100	12/30	12	3.2	17.4	14.2*
#Mount Baldy	14F9	9000	12/26	19	4.7	10.2	9.6*
Prairie (A)	15F6	5600	12/29	0	0.0	--	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average.  
 (A) Aerial observation: Water content estimated.



**SNOW**

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>
#Soldier Rgr. Sta.	14F11	6100	12/29	11	3.4	6.4	--
Road Creek (A)	15F3	6800	12/29	T	T	--	--
Trinity Mountain (A)	15F5	7400	12/29	35	9.3	21.3	16.6*
Willow Creek Cabin (A)	15F11	4710	12/29	0	0.0	--	--

**OWYHEE RIVER**

#Bear Creek (A)	15H1	7800	12/31	12	2.9	8.1	7.1*
Big Bend	15H4	6700	12/27	T	T	3.3	3.3*
Fry Canyon	15H7	6700	12/27	T	T	3.5	3.1*
Gold Creek	15H5	6600	12/27	T	T	2.5	1.9*
Lower Jack Creek	16H1	6800	12/27	T	T	1.8	1.1*
Rodeo Flat	15H6	6800	12/27	T	T	2.5	3.3*
Silver City	16F3	6400	12/30	3	0.8	8.1	6.6*
South Mountain	16G1	6340	12/28	2	0.4	3.7	5.2*
Taylor Canyon	15H9	6200	12/27	0	0.0	1.8	1.8*
#Tremewan Ranch	15H8	5700	12/27	0	0.0	T	0.7*
Upper Jack Creek	16H2	7250	12/27	T	T	4.8	3.5*

**PAYETTE RIVER**

Big Creek Summit	15E2	6608	12/28	37	12.4	--	--
Bogus Basin	16F2	6120	12/31	10	2.3	13.3	10.7*
Cozy Cove	15E8	5900	12/28	6	2.1	10.9	7.0*
Crawford Rgr. Sta.	15E3	4800	12/28	0	0.0	--	--
Deadwood Airstrip	15E10	5440	12/28	6	2.1	10.1	7.1*
Deadwood Dam	15E7	5500	12/28	8	2.9	10.4	7.9*
Deadwood Summit (A)	15E4	7000	12/28	58	19.4	--	--
Greenfield Flat (A)	16E7	7370	12/31	37	12.4	--	--
High Valley Summit	16E4	5170	12/28	T	T	--	--
#Moore's Creek Summit	15F1	6100	12/30	12	3.2	17.4	14.2*
Rock Flat Summit	16E1	5200	12/28	9	2.1	10.6	8.0*
Squaw Meadow (A)	15D2	5800	12/28	38	12.7	--	--
Tripod Summit	16E3	5200	12/28	T	T	--	--

**WEISER RIVER**

Boulder Creek	16D1	5500	12/26	19	5.1	14.1	--
#Greenfield Flat (A)	16E7	7370	12/31	37	12.4	--	--
Mica Ridge (A)	16E6	6800	12/31	37	12.4	--	--
Squaw Flat (A)	16E5	6230	12/31	37	12.4	--	--

**SALMON RIVER**

Above Gilmore (A)	13E19	8200	1/2	16	3.2	--	--
Big Creek Summit	15E2	6608	12/28	37	12.4	--	--
Borah (A)	13E8	8250	1/2	8	1.6	--	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average.  
 (A) Aerial observation: Water content estimated.

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>
#Boulder Creek	16D1	5500	12/26	19	5.1	14.1	--
Chapman Creek	16D2	4215	12/31	0	0.0	4.0	1.4*
Copes Camp (A)	13E17	7500	1/2	12	2.4	--	--
#Deadwood Summit (A)	15E4	7000	12/28	58	19.4	--	--
#Galena Summit	14F12	8795	12/28	23	6.1	12.7	9.5*
Johns Creek	16D3	3805	12/31	0	0.0	3.6	1.0*
Meadow Lake (A)	13E18	9100	1/2	36	9.5	--	--
Mill Creek Summit (A)	14E1	8870	1/2	23	6.1	--	--
Pahsimeroi (A)	13E9	7600	1/2	1	0.2	--	--
#Rock Flat Summit	16E1	5200	12/28	9	2.1	10.6	8.0*
Schwartz Lake (A)	13E16	8500	1/2	18	3.6	--	--
Twin Peaks	14E3	9190	1/2	21	5.6	--	--
Whitebird Summit	16D5	4390	12/31	T	T	6.1	2.2*

CLEARWATER RIVER

Above Greer	16C11	1240	12/31	0	0.0	T	--
Cayuse Airstrip	15C3	3700	12/28	T	T	11.5	3.3*
Fish Lake Airstrip	15C2	5000	12/28	32	11.5	27.6	17.4*
Greer Summit	16C13	3000	12/31	0	0.0	3.3	--
Midway	16C12	2200	12/31	0	0.0	1.8	--
Pierce Rgr. Sta.	15C5	3171	12/29	T	T	8.8	5.2*

PALOUSE RIVER

Crumarine Creek	16C6	3500	12/29	T	T	6.1	2.3*
East Twin	16C3	4000	12/29	T	T	9.9	5.1*
Howard Creek	16C5	3500	12/29	T	T	3.6	2.1*
Moscow Mountain	16C2	4800	12/29	4	1.0	12.0	7.1*
West Twin	16C4	4200	12/29	T	T	8.2	4.0*

BEAR RIVER BASINMONTPELIER CREEK

Giveout	11G16	6850	12/27	7	1.4	--	--
Little Beaver	11G20	7000	12/27	8	1.8	--	--
Montpelier Creek	11G18	6600	12/27	4	1.0	--	--
Whiskey Flat	11G21	6900	12/27	4	0.7	--	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average.  
 (A) Aerial observation: Water content estimated.

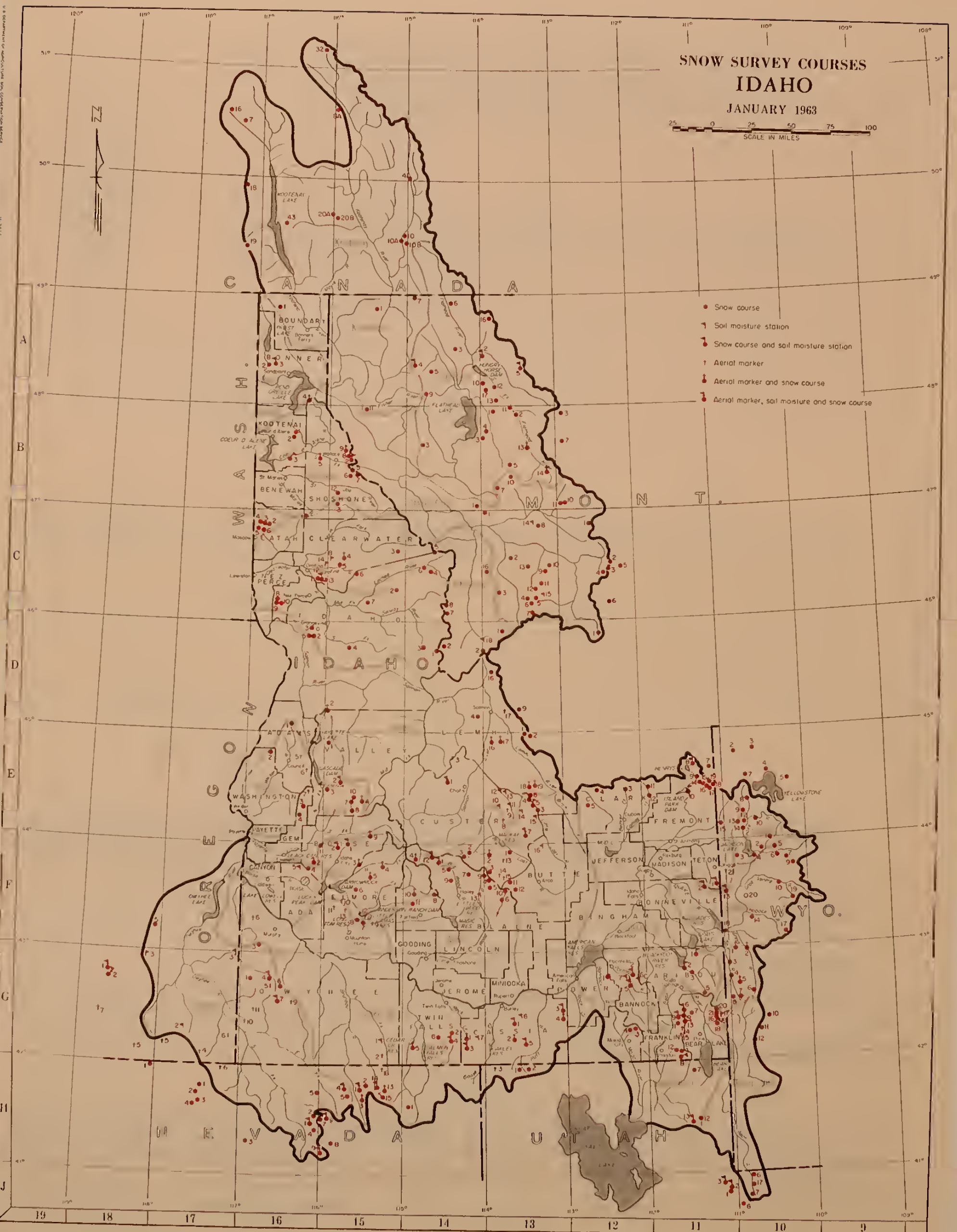


# SNOW SURVEY COURSES IDAHO

JANUARY 1963



- Snow course
- 1 Soil moisture station
- 1 Snow course and soil moisture station
- ↑ Aerial marker
- ↑ Aerial marker and snow course
- 1 Aerial marker, soil moisture and snow course



# Index to IDAHO SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	AND	LONG.				LAT.	AND	LONG.						LAT.	AND	LONG.				LAT.	AND	LONG.		
KOOTENAI RIVER																											
16311	M	Burns Creek	36	26N	11W	5500	1083	WY	Canyon	44°44'	110°30'	7750	13113	I	Bear Canyon	24	5N	21E	8500	13114	I	Cherry Creek Pass	7	5N	21E	8500	
16312	M	Brush Creek	13	12N	26W	5000	1084	WY	COC Camp	44°44'	110°30'	7750	13115	I	Cherry Creek Pass	7	5N	21E	8500	13116	I	Copper Basin	24	4N	22E	7650	
16313	M	Ferguson	40°20'	11°02'N	2900	1085	WY	Cottonwood Lake	44°44'	110°30'	7750	13117	I	Copper Basin	24	4N	22E	7650	13118	I	Copper Basin	24	4N	22E	7650		
16314	M	Fernie	40°21'	11°03'N	3500	1086	WY	Coulter Creek	44°44'	110°30'	7750	13119	I	Copper Basin	24	4N	22E	7650	13120	I	Copper Basin	24	4N	22E	7650		
16315	M	Ferrand	40°22'	11°04'N	6000	1087	WY	Deadman Ranch	44°44'	110°30'	7750	13121	I	Copper Basin	24	4N	22E	7650	13122	I	Copper Basin	24	4N	22E	7650		
16316	M	Gray Creek	40°23'	11°05'N	5100	1088	WY	East Rim Divide	44°44'	110°30'	7750	13123	I	Copper Basin	24	4N	22E	7650	13124	I	Copper Basin	24	4N	22E	7650		
16317	M	Hamberley	40°24'	11°06'N	3800	1089	WY	East Rim Divide	44°44'	110°30'	7750	13125	I	Copper Basin	24	4N	22E	7650	13126	I	Copper Basin	24	4N	22E	7650		
16318	M	Marble Canyon	40°25'	11°07'N	5300	1090	WY	Four Mile Meadows	44°44'	110°30'	7750	13127	I	Copper Basin	24	4N	22E	7650	13128	I	Copper Basin	24	4N	22E	7650		
16319	M	Morrissey Ridge	40°26'	11°08'N	6100	1091	WY	Glade Creek	44°44'	110°30'	7750	13129	I	Copper Basin	24	4N	22E	7650	13130	I	Copper Basin	24	4N	22E	7650		
16320	M	Nelson	40°27'	11°09'N	6100	1092	WY	Greys Boundary	44°44'	110°30'	7750	13131	I	Copper Basin	24	4N	22E	7650	13132	I	Copper Basin	24	4N	22E	7650		
16321	M	New Fernie	40°28'	11°10'N	4100	1093	WY	Groa Vontre Summit	44°44'	110°30'	7750	13133	I	Copper Basin	24	4N	22E	7650	13134	I	Copper Basin	24	4N	22E	7650		
16322	M	Red Mountain	40°29'	11°11'N	4100	1094	WY	Grover Park Divide	44°44'	110°30'	7750	13135	I	Copper Basin	24	4N	22E	7650	13136	I	Copper Basin	24	4N	22E	7650		
16323	M	Sandson	40°30'	11°12'N	4500	1095	WY	Huckleberry Divide	44°44'	110°30'	7750	13137	I	Copper Basin	24	4N	22E	7650	13138	I	Copper Basin	24	4N	22E	7650		
16324	M	Staircase Pass	40°31'	11°13'N	4500	1096	WY	Lake Camp	44°44'	110°30'	7750	13139	I	Copper Basin	24	4N	22E	7650	13140	I	Copper Basin	24	4N	22E	7650		
16325	M	Smith Creek	40°32'	11°14'N	4900	1097	WY	Lewis Lake Divide	44°44'	110°30'	7750	13141	I	Copper Basin	24	4N	22E	7650	13142	I	Copper Basin	24	4N	22E	7650		
16326	M	Sullivan Mine	40°33'	11°15'N	5100	1098	WY	Moran	44°44'	110°30'	7750	13143	I	Copper Basin	24	4N	22E	7650	13144	I	Copper Basin	24	4N	22E	7650		
16327	M	Upper Elk River	40°34'	11°16'N	4200	1099	WY	Moran Bay	44°44'	110°30'	7750	13145	I	Copper Basin	24	4N	22E	7650	13146	I	Copper Basin	24	4N	22E	7650		
16328	M	Wesley Divide	40°35'	11°17'N	4400	1100	WY	Morris Basin	44°44'	110°30'	7750	13147	I	Copper Basin	24	4N	22E	7650	13148	I	Copper Basin	24	4N	22E	7650		
PRIEST RIVER																											
16401	I	Benton Meadow	30	55N	4W	2341	1101	WY	Polson Meadows	44°44'	110°30'	7750	13167	I	Copper Basin	24	4N	22E	7650	13168	I	Copper Basin	24	4N	22E	7650	
16402	I	Benton Spring	30	55N	4W	2400	1102	WY	Salt River Summit	44°44'	110°30'	7750	13169	I	Copper Basin	24	4N	22E	7650	13170	I	Copper Basin	24	4N	22E	7650	
PEND OREILLE - CLARK FORK RIVER																											
13013	M	Black Pine	23	8N	15W	7100	1103	WY	Snake River Station	44°44'	110°30'	7750	13173	I	Copper Basin	24	4N	22E	7650	13174	I	Copper Basin	24	4N	22E	7650	
13014	M	Obesman Reservoir	2	8N	5E	6200	1104	WY	Snow King Mountain #3	44°44'	110°30'	7750	13175	I	Copper Basin	24	4N	22E	7650	13176	I	Copper Basin	24	4N	22E	7650	
13015	M	Copper Creek	1	15N	9W	5700	1105	WY	Sylvan Pass	44°44'	110°30'	7750	13177	I	Copper Basin	24	4N	22E	7650	13178	I	Copper Basin	24	4N	22E	7650	
13016	M	Cotton Creek	2	15N	9W	6250	1106	WY	Thumb Divide	44°44'	110°30'	7750	13179	I	Copper Basin	24	4N	22E	7650	13180	I	Copper Basin	24	4N	22E	7650	
13017	M	Coyote Hill	12	18N	16W	4200	1107	WY	Thompson Pass	44°44'	110°30'	7750	13181	I	Copper Basin	24	4N	22E	7650	13182	I	Copper Basin	24	4N	22E	7650	
13018	M	El Dorado Mine	23	8N	15W	7200	1108	WY	Turpin Meadows	44°44'	110°30'	7750	13183	I	Copper Basin	24	4N	22E	7650	13184	I	Copper Basin	24	4N	22E	7650	
13019	M	Fred Burr Pass	12	6N	17W	8000	1109	WY	Yellowjacket	44°44'	110°30'	7750	13185	I	Copper Basin	24	4N	22E	7650	13186	I	Copper Basin	24	4N	22E	7650	
13020	M	Georgetown Lake	6	5N	12W	6250	1110	WY	Big Springs	44°44'	110°30'	7750	13187	I	Copper Basin	24	4N	22E	7650	13188	I	Copper Basin	24	4N	22E	7650	
13021	M	Golf Creek Lake	14	8N	14W	7200	1111	WY	Black Canyon	44°44'	110°30'	7750	13189	I	Copper Basin	24	4N	22E	7650	13190	I	Copper Basin	24	4N	22E	7650	
13022	M	Hoodoo Creek	9	14N	27W	6200	1112	WY	Black Moose	44°44'	110°30'	7750	13191	I	Copper Basin	24	4N	22E	7650	13192	I	Copper Basin	24	4N	22E	7650	
13023	M	Interguard	6	5N	12W	6250	1113	WY	Grassy Lake	44°44'	110°30'	7750	13193	I	Copper Basin	24	4N	22E	7650	13194	I	Copper Basin	24	4N	22E	7650	
13024	M	Lutrecht Forest	11	13N	14W	4200	1114	WY	Island Park	44°44'	110°30'	7750	13195	I	Copper Basin	24	4N	22E	7650	13196	I	Copper Basin	24	4N	22E	7650	
13025	M	Lutrecht Forest	11	13N	14W	4200	1115	WY	Lathas Springs	44°44'	110°30'	7750	13197	I	Copper Basin	24	4N	22E	7650	13198	I	Copper Basin	24	4N	22E	7650	
13026	M	North Fork Jocko	3	10N	14W	6330	1116	WY	Lucky Dog	44°44'	110°30'	7750	13199	I	Copper Basin	24	4N	22E	7650	13200	I	Copper Basin	24	4N	22E	7650	
13027	M	Pipestone Pass	20	1N	17W	7200	1117	WY	Old Road	44°44'	110°30'	7750	13201	I	Copper Basin	24	4N	22E	7650	13202	I	Copper Basin	24	4N	22E	7650	
13028	M	Red Lion	17	6N	13W	7100	1118	WY	Poacher's Cabin	44°44'	110°30'	7750	13203	I	Copper Basin	24	4N	22E	7650	13204	I	Copper Basin	24	4N	22E	7650	
13029	M	Slide Rock Mountain	3	10N	14W	7100	1119	WY	Valley View	44°44'	110°30'	7750	13205	I	Copper Basin	24	4N	22E	7650	13							



# Agencies Assisting with Snow Surveys , etc.

## GOVERNMENT AGENCIES

### Canada:

Department of Lands, Forests, and  
Water Resources, British Columbia  
Department of Resources and Development,  
Water Resources Division

### States:

Idaho State Reclamation Engineer  
and Corps of State Watermasters  
State of Idaho Department of Fish and  
Game  
University of Idaho  
Idaho State College  
Montana Agricultural Experiment Station  
Montana State Water Conservation Board  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon State Engineer and Corps of  
State Watermasters  
Utah Cooperative Snow Surveys  
Wyoming Cooperative Snow Surveys

### Federal:

U. S. Army Engineers  
  
U. S. Department of Agriculture  
Forest Service  
Agricultural Research Service  
  
U. S. Department of Commerce  
Weather Bureau  
  
U. S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Geological Survey  
Indian Service  
National Park Service  
Bureau of Land Management

## PUBLIC UTILITIES

The Montana Power Company  
Washington Water Power Company  
Idaho Power Company  
Utah Power and Light Company

## ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District  
Boise Project Board of Control  
Little Wood River Irrigation District  
Jordan Valley Irrigation District  
Salmon Falls Creek Irrigation Company  
Twin Falls Soil Conservation District  
Twin Lakes Irrigation Company  
Big Wood Irrigation Company  
Owyhee Project - North & South Board of Control

## PRIVATE CORPORATIONS

Amalgamated Sugar Company

*Other organizations and individuals furnish valuable information for  
snow survey reports. Their cooperation is gratefully acknowledged.*

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